

1/11

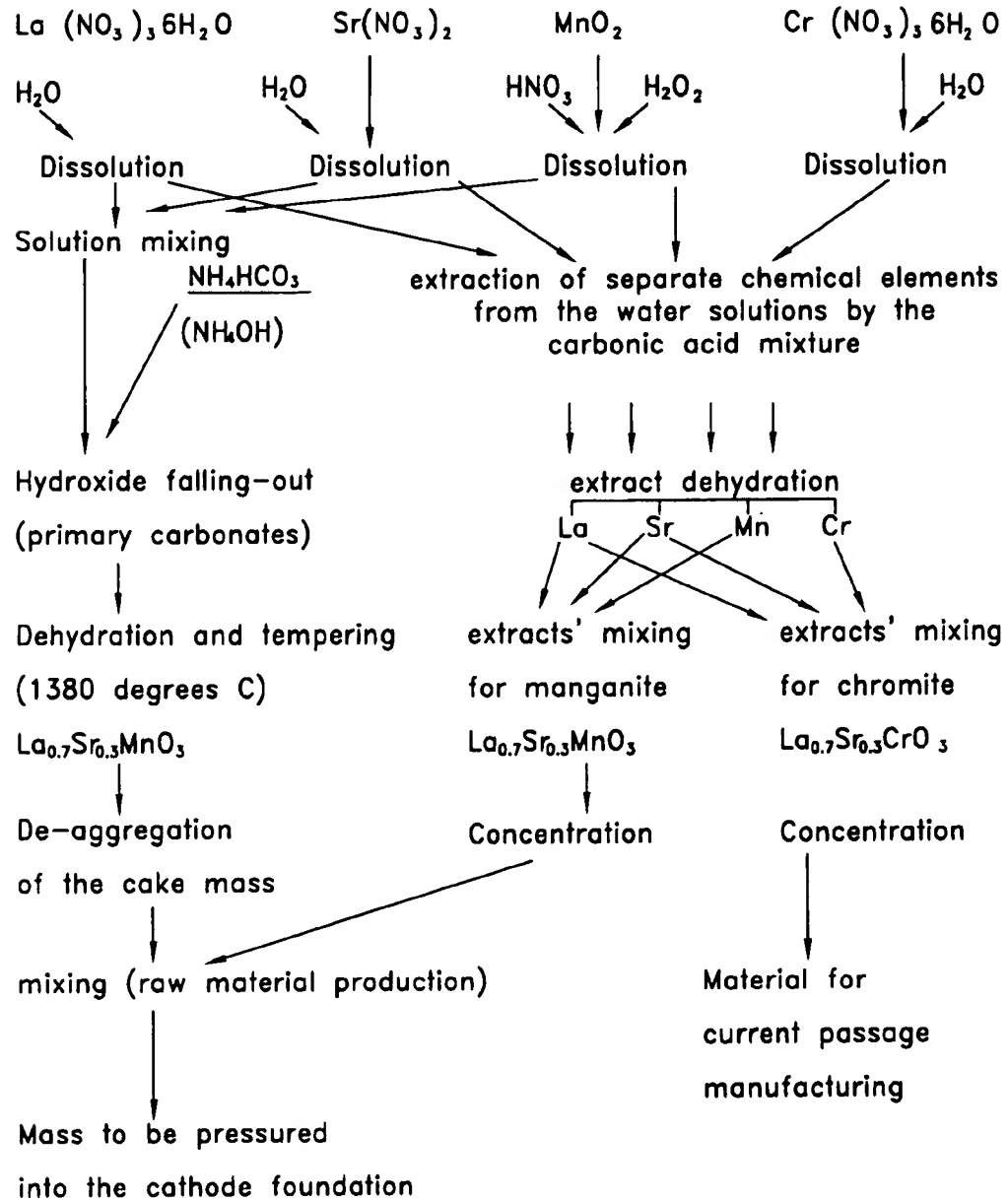


FIG. 1

```

graph TD
    Y2O3 --> Diss1[Dissolution]
    Sc2O3 --> Diss2[Dissolution]
    ZrO3NO3xH2O --> Diss3[Dissolution]
    NiNO32xH2O --> Diss4[Dissolution]
    CA[carbonic acids] --> Y
    CA --> Sc
    CA --> Zr
    CA --> Ni
    
    Diss1 --> SM[Solution mixing]
    Diss2 --> SM
    Diss3 --> SM
    
    SM --> NH4OH[NH4OH]
    NH4OH --> HFO[Hdroxide falling-out]
    HFO --> DTP["Dehydration and tempering  
(1380 degrees C, 4 hours)"]
    
    DTP --> PFM["Powder fragmentation  
in the extract medium"]
    PFM --> MM["mixing with the  
powdered metallic Ni"]
    MM --> PAM["Product for anode manufacturing"]
    
    DTP --> E[Extraction]
    E --> MDE["Mixing and dehydration of extracts"]
    MDE --> EC["Extracts' concentration"]
    EC --> PME["Product for manufacturing the electrolyte"]
    
    PME --> Formula["91.3 ZrO2+ 5.0 Sc2O3 + 3.7 Y2O2"]
    
    PFM --> Formula
  
```

FIG. 2

3/11

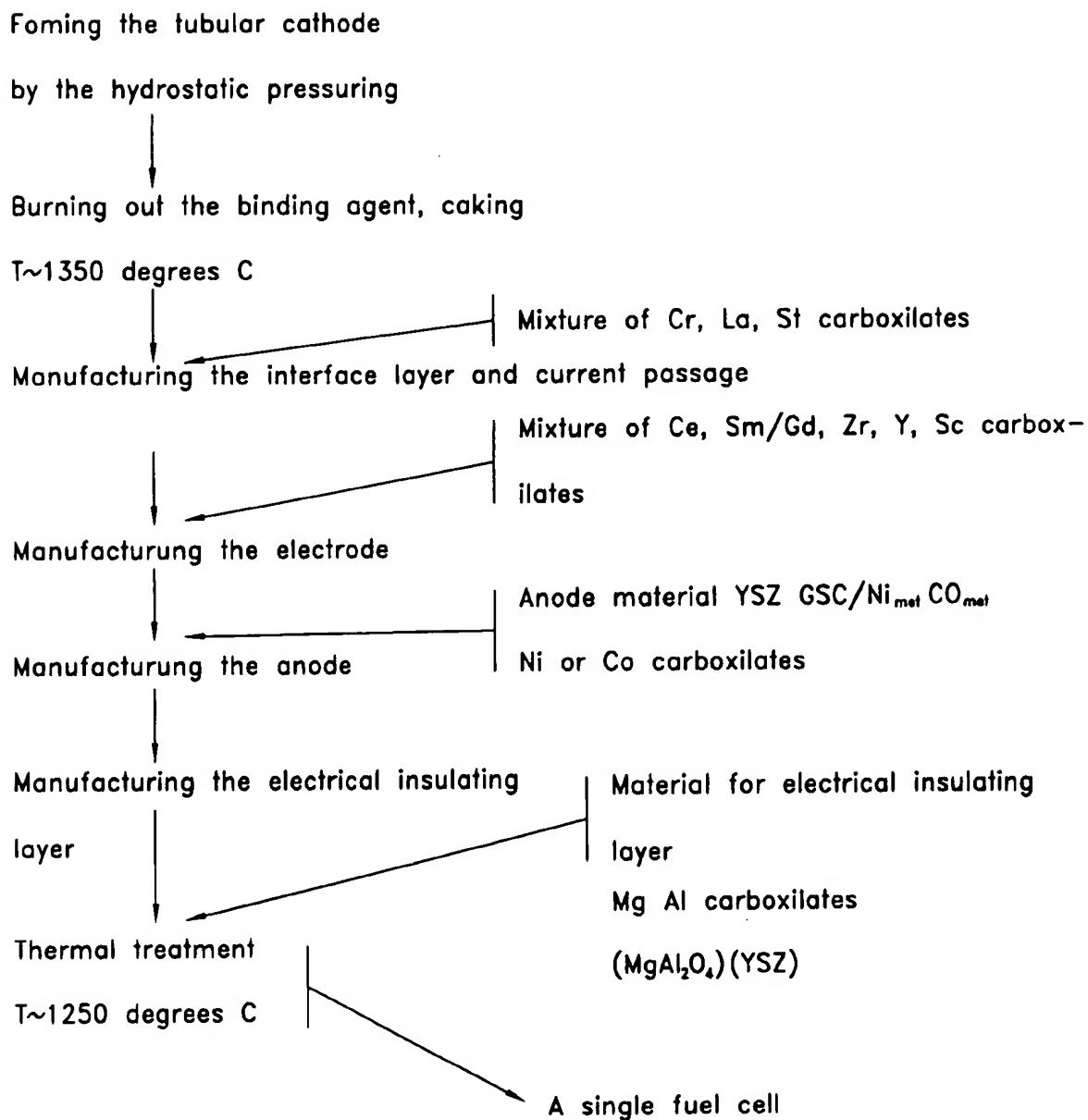


FIG. 3

4/11

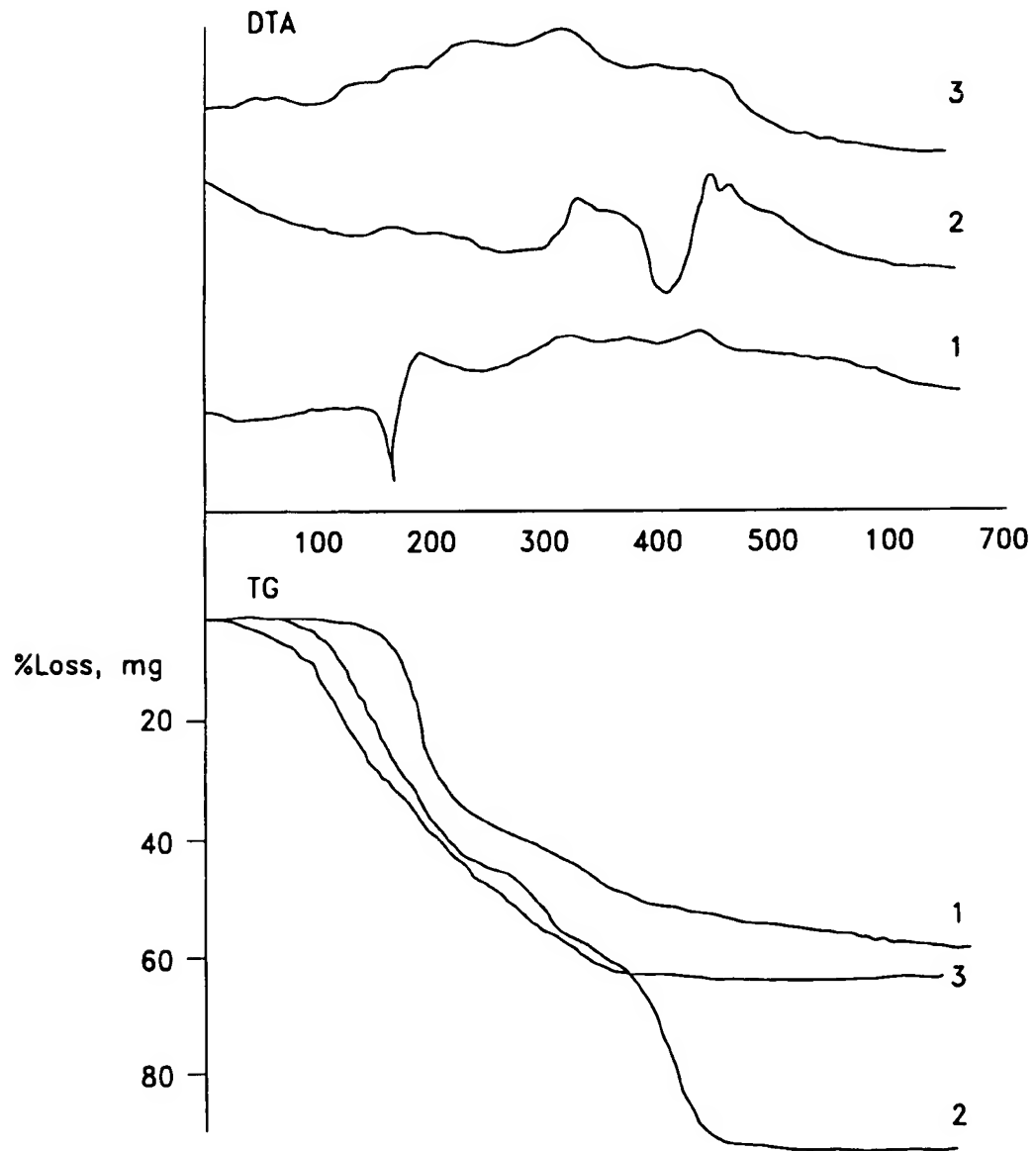


FIG. 4

5/11

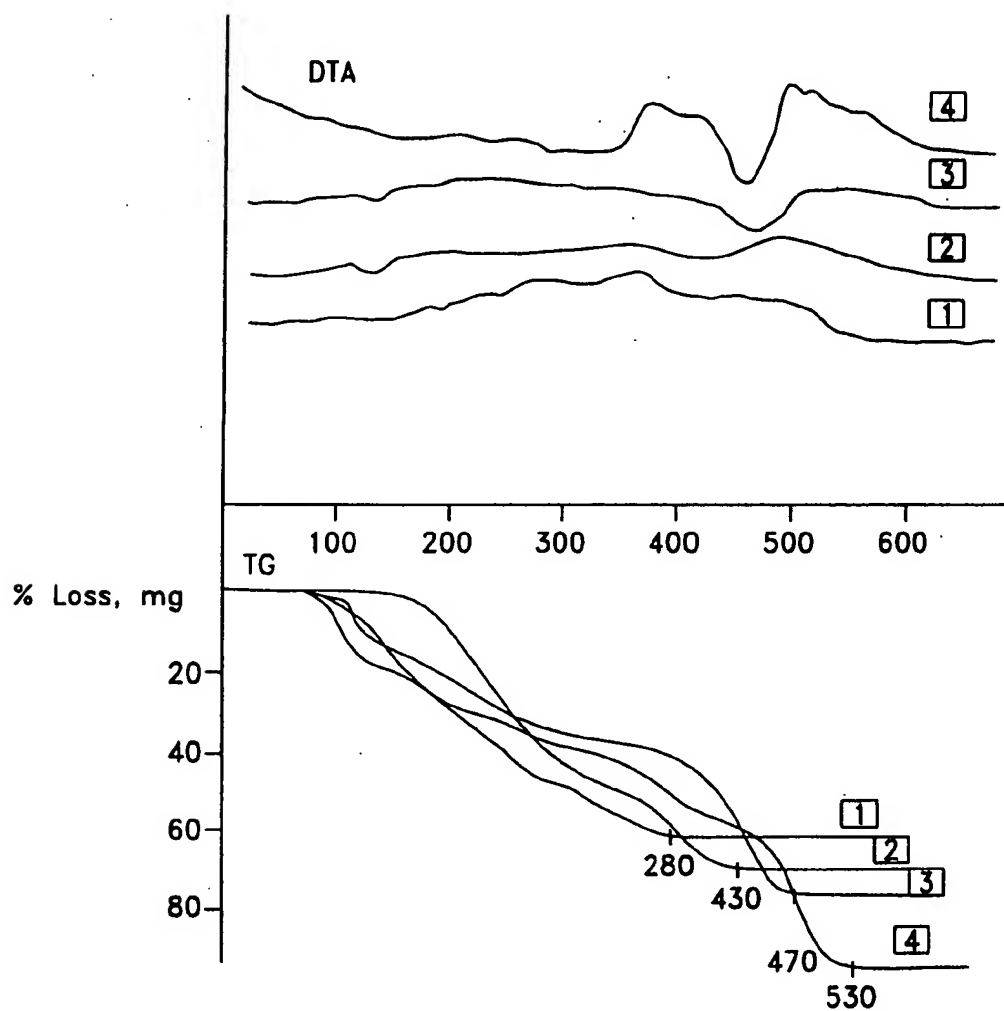


FIG. 5

METHOD FOR MANUFACTURING A SINGLE HIGH-TEMPERATURE FUEL CELL AND...

Sevastyanov et al.

Appl. No.: 10/010,083 Atty Docket: VALER6.001C1

9/11

Measurement of the signal profile
Length = 30.7 μm
Average Length = 30.7 μm
X = 69.8 μm
Y = 131.8 μm



FIG. 9

10/11

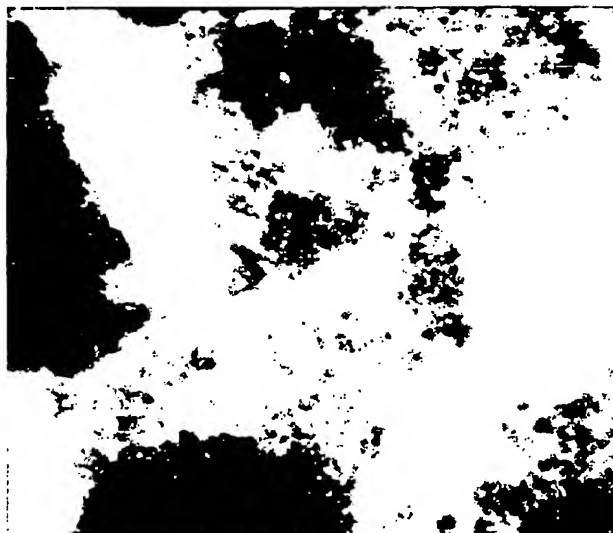


FIG. 10

11/11



FIG. 11